



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

Air Toxics Workgroup (ATW)
Meeting Summary
April 16, 2013

Members Present:

James Clift, MI Environmental Council
Greg Ryan, DTE Energy
Brad Venman, NTH
Kim Essenmacher, GM
Kory Groetsch, MDCH
Mary Ann Dolehanty, AQD

John Caudell, Fishbeck Thompson Carr & Huber
Steve Kohl, Warner Norcross & Judd (on phone)
Carrie Houtman, Dow Chemical Company
David Gustafson, Dow Chemical Company
Bob Sills, AQD
Joy Taylor Morgan, AQD, Facilitator

Members Absent:

Stuart Batterman, U of M and Brad van Guilder, Sierra Club

Guests/Observers Present:

Mary Maupin, AQD
Jim Sygo, Deputy Director, MDEQ
Karen Kajiya-Mills, AQD

Mike Depa, AQD
Vince Hellwig, Chief, AQD

The meeting began with the Facilitator asking the Workgroup members (Members) if they had any changes to the March meeting summary. There were none, so she said the summary would be finalized and placed on the ATW web site.

A-1(3): exemption for sources in a MACT category

She adjusted the agenda due to Members' schedules and the first item that was discussed was recommendation A-1(3). This is a recommendation to exempt sources from a toxics review if the sources are regulated under a maximum achievable control technology (MACT) source category standard. Bob Sills gave an overview of the issue and mentioned that Steve Kohl had shared a summary of the North Carolina rules that exempt sources if they are in a MACT category. Steve has said it is more of a policy issue. Bob and Vince mentioned that the burden would be shifted to AQD staff and away from the applicant, and this would pose a staffing and resource concern for this type of review. Vince mentioned that a MACT does not control for all toxics. Many of the MACT source categories are under reconsideration because of toxics review issues. Vince indicated that AQD does not have the staff to do the work and meet permit deadlines, and also, there is a concern that we would be more subject to challenge if we were evaluating our own work. Bob mentioned that under EPA's 112(f) residual risk review, EPA does evaluate toxic emissions based on a health review and not just control technology like a MACT. Control technology requirements do not ensure adequate public health protection. Residual risk reviews are conducted at least eight years after a MACT; only about 30 out of approximately 170 MACT sources have undergone a 112(f) assessment. A Member asked if additional control was required by EPA after the 112(f) review, and the answer was yes, in some cases. There was a concern by a Member that AQD reviews each individual pollutant, whereas EPA reviews surrogates for each individual air pollutant. Bob mentioned that Michigan's toxics rules supplement and compliment the EPA rules; hazardous air pollutants (HAPs) are exempt from R 225 if there is a MACT and 112(f) assessment.

A Member commented that if it is a burden to the applicant to do a Rule 225 health evaluation to get a permit application submitted, then that same type of burden will be moved to the Department under this recommendation. And if resource constraints prevent the agency from doing the evaluation, no review is done, and then what? It was mentioned that if the TAC list was limited, this would allow companies some additional flexibility. A Member mentioned that the screening levels used for the risk assessment are very conservative and could be adjusted. Bob mentioned that we can efficiently show that emissions are safe if using the screening levels; if we used 226(d) and conduct a case-by-case review it can be time-consuming; however, we only conduct approximately two of those each year. This requires additional time and resources beyond only utilizing the screening levels. Vince gave an example of ethylene oxide sterilizers and if only relying on EPA regulations then no control would be required if we followed the MACT. However, the emissions of this carcinogen would not have been safe. A Member felt that for VOCs, it is not the same; if a MACT controls for the HAPs then the controls would control similar pollutants.

A Member stated that a health evaluation is needed so that we are not “blind” to the risks, and asked whether or not there was a demonstration that the air toxics rules were onerous? A Member answered that the regulations are onerous due to the time and resources involved in the permit application, and, due to stack testing requirements that may follow; the recommendation was based on trying to balance resources and economics.

Another Member mentioned that if the burden was shifted to AQD, and AQD had the resources to perform the evaluations, it may not speed up the permit process.

A Member mentioned that there might be a compromise for this recommendation depending on what happens with recommendation A-1(6) that addresses the TAC list. The Facilitator recommended that this discussion be tabled for now, until the Members can talk in more detail on A-1(6).

A-1(8) sub-issue: stack test reporting template

The Members then listened to Karen Kajiya-Mills, Supervisor of the AQD's Technical Programs Unit, discuss a reporting tool developed by EPA. Karen said that there is an Electronic Reporting Tool (ERT) that has been in existence since 2009. It allows for a central data exchange of stack test data. At present, only some facilities subject to a MACT are expected to report into the ERT; however, in the near future, EPA may expand the requirement to all NSPS sources. In Michigan there is only one company reporting, which is the Cobb Consumer Energy plant. One of the Members said that this is a very complicated system.

Vince mentioned that it cost \$500K for a two page asbestos reporting program; AQD does not have the resources to develop any new stack test reporting database. Karen has an internal database which shows who reviews the stack tests, but no data is included. Karen said that all 114 data will even be included in the ERT eventually; AQD would not want to reinvent the wheel. John and Greg offered to develop a one page template that could be useful.

The Facilitator mentioned that the Members need to focus on completing the ORR recommendations by the August 1st deadline and that the development of a template, while useful, goes beyond the specific recommendation of A-1(8). She suggested that we focus on the costly stack test issue first and then we can work on the template after August 1st. Perhaps this group can work with EPA on improving the consistency of reporting and share a simple template form.

Since the ERT does exist and AQD does not have the resources to develop its own database then it seems to make sense to work together with EPA.

A-1(8): stack testing requirements in PTI

Mary Ann gave an overview of a two-page discussion paper that was intended to address A-1(8). The document states that stack testing to demonstrate compliance is a core component of the program, and the need for stack testing will be determined on a case-by-case basis. AQD will not require stack testing where it is not warranted. AQD will work with the regulated community on the development of a data submittal template.

The Members were mostly in agreement with this document and agreed to send changes to Joy.

A-1(1): T-BACT and VOCs

Mary Ann gave an overview of the one-page discussion paper to address A-1(1). She added some specific language, “including R36.1702 BACT,” to clearly demonstrate that VOC emissions that are subject to Rule 702 are exempt from Rule 224.

All of the Members agreed with the language revision and a celebratory cheer resulted in the Members’ first completed recommendation.

A-1(4): exempt clean fuels

The Members then began a discussion of the clean fuels issue. Mike Depa gave an overview of the most recent draft of the Clean Fuels Discussion paper that AQD staff developed. Wood and biodiesel were added to the document. With use of emission factors and algorithms, dispersion modeling was conducted and the impacts were determined at the fence line. The tables present the process type with the highest chemical-specific emission factors and the pollutants with modeled impacts that exceed screening level values. The document also describes the margin of safety and conservative aspects of the exercise, which is important for the interpretation of the public health significance of SL exceedance for both carcinogens and non-carcinogens. A discussion followed of what level of conservatism is used in the review, and the critical effects of various pollutants such as whether a pollutant is an irritant or carcinogen. A Member noted that typically the only air toxics approaching SLs are arsenic and chromium; a question was asked as to whether chromium emissions were all assumed to be chromium 6; they were not. The Members also agreed to not tackle fuel switches under this recommendation. While biodiesels were reviewed a Member mentioned that in the ORR recommendations “non-chemically treated biofuels” were listed. Biofuels is a much broader category.

Members discussed that the overall intent of the recommendation was to create a regulatory incentive for companies to move more toward relatively cleaner fuels, by removing barriers imposed by the required air toxics assessment in PTI applications. The modeled impact tables represent the breadth of air toxics that have emission factors for each of the fuels, and the magnitude of SL exceedance with the modeling assumptions. SL exceedance does not necessarily indicate unacceptability of exemptions, but it does inform risk management decision-making, and it may support establishing some limitations or criteria for qualifying for an exemption.

Members asked that additional information be provided on the rating of the emission factors and the range of emission factors when multiple factors were found for the same process and chemical. Mike stated that he generally selected the highest emission factor available, and they could range over orders of magnitude. He also focused the exercise on uncontrolled emission factors; it was pointed out that in many cases such sources would have emission controls and would be subject to regulations such as the RICE rule. Mike also noted that the modeling and meteorology were conservative. A Member asked if AQD staff could conduct spot checks for actual clean fuel permits issued, to help indicate how the results of the modeling exercise compare to actual permitting scenarios and real-world ambient air impacts. AQD agreed to do that. The range of fuels evaluated thus far (natural gas, diesel, wood, and biodiesel) was generally considered to be sufficient; biodiesel types vary greatly, and perhaps the air toxics emissions data availability may limit the scope to soy and animal biodiesel fuel types. A Member noted that the IRSL is a de minimis risk level, and, some health benchmarks used may be even below levels found in indoor air. AQD staff will gather additional information to provide in a technical support document for the "Clean Fuels Discussion Paper."

A-1(5): exempt pollution control projects

A discussion of recommendation A-1(5) regarding exemption of pollution control projects commenced. Mary Ann Dolehanty mentioned that Rule 285 already allows for pollution control project exemptions. For sources that don't meet that exemption from needing a permit, we could evaluate if they should be exempted from R 225.

John Caudell handed out a draft definition of a pollution control project that included modifications including a change to cleaner fuels, replacing fuel oil with natural gas and a "meaningful change" in raw material.

Mary Ann mentioned that EPA will not be approving AQD's SIP because of Rule 285's interpretation of "meaningful change" (from a historical memo written by a former AQD employee) under Rule 285(b); however, the concept may still be appropriate for a R 225 exemption. There may be good examples where a R 225 review makes no sense, depending on the proposed technology involved in the permit application.

A Member asked what would be exempt, the response was: a baghouse, dry sorbent injection, acid gas control, sorbent control, mercury control, raw material substitution, etc. A Member gave the example of changing from a cyclone to a baghouse under a MACT requirement; the result would be increased PM control, and changes in gas flow; if this is beneficial, would a R 225 review be appropriate?.

The Facilitator asked if John Caudell would be willing to lead the effort to develop an issue paper on the topic of "pollution control projects" that may be exempted from R 225. He agreed to do so.

A-1(6): the TAC list

Discussion followed on recommendation A-1(6), which is to limit the number of air toxics to the federal HAP list. Bob Sills gave an overview of the "TAC List" discussion paper he developed. He developed a "goal statement" to follow ORR's recommendation to allow better focus, with guiding concepts. The Members generally agreed with these. He suggested that we could establish a defined TAC list, but have the capability to add or delete pollutants on this list. If the

pollutants are not on the list, the regulated community should still have to disclose what they are emitting; the AQD could potentially evaluate the impacts and ensure public health protection.

One Member said they were fine with the approach and another said they still preferred the “status quo”, as in, no list of TACs. A question was how does one defend a list?

Bob walked Members through the document. He mentioned that not all HAPs may be relevant to Michigan, and could be excluded from our TAC list. He thought it made sense to include all the carcinogens, but perhaps not those pollutants where there was a default screening level established due to a lack of useful toxicity data (there are 287 of these default TACs). Bob also presented the possibility of using a cut-off value when considering the range of ITSLs. If for example, the 75th percentile of the distribution of ITSLs was used as a cut-off value, together with the other criteria, the result would be approximately 639 TACs. A question was asked about using surrogate compounds, and Bob mentioned that it may be appropriate to use surrogate compounds for assessing control technology effectiveness, but it does not make sense for using that approach broadly for toxicology assessments because structurally similar chemicals can differ greatly in toxicity. A Member commented that it was critical that the Division be able to easily add pollutants to the TAC list in a timely manner. Another Member was concerned with having a list because agencies typically do not have the resources to add or delete from the list. And, some might switch to using an unlisted chemical even though it is not a safer alternative (it just lacks toxicity data). Another Member disagreed with this activity generally occurring.

The Facilitator asked Members to send her revisions in track changes on the “TAC List” Discussion paper. AQD will further develop this approach, including providing Members with a list of air toxics that would be listed as TACs or unlisted under this methodology, with the basis for listing or not listing.

Due to a lack of time, the last items on the agenda were tabled until the next meeting in May. This includes: issue A-1(7) (follow other states); A-1(9) (Rule 228) and A-1(2) (permit modification reviews >10% hazard index).

Action Items to be Completed Prior to the Next ATW Meeting:

- John Caudell and Greg Ryan offered to develop a stack test template and share with the Members.
- Members agreed to review the A-1(8) write up and send any revisions in track changes to Joy.
- AQD staff will provide additional technical details for the Clean Fuels Discussion Paper.
- John Caudell will lead the effort with Carrie and Brad Venman on developing an issue paper on “pollution control projects.”
- Members are to review the “TAC List” Discussion paper and send comments to Joy. AQD will further develop a draft list of TACs.

Meeting Summary prepared by: Joy Taylor Morgan, Facilitator, May 16, 2013.